

- 1.** A method comprising:
deducing a signal strength of a first signal, R_D , at a wireless terminal based on a transmit strength of a second signal, T_U , that is transmitted by said wireless terminal; and
estimating the location of said wireless terminal based on said signal strength of said first signal, R_D .
- 2.** The method of claim 1 wherein deducing said signal strength of said first signal, R_D , is also based on a transmit strength of said first signal, T_D .
- 3.** The method of claim 1 wherein deducing said signal strength of said first signal, R_D , is also based on a signal-strength measurement for said second signal, R_U , at the location where said first signal is transmitted.
- 4.** The method of claim 1 wherein deducing said signal strength of said first signal, R_D , is also based on an attenuation for said second signal, A_U , between said wireless terminal and the location where said first signal is transmitted.
- 5.** The method of claim 1 wherein estimating the location of said wireless terminal comprises pattern matching said signal strength of said first signal, R_D , against a database that associates candidate locations for said wireless terminal with predicted signal-strength measurements for said first signal.
- 6.** The method of claim 1 wherein estimating the location of said wireless terminal is also based on a signal-strength measurement of a third signal, R_I , at said wireless terminal.
- 7.** The method of claim 6 wherein estimating the location of said wireless terminal is based on said signal strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .
- 8.** The method of claim 6 wherein estimating the location of said wireless terminal is based on the absolute magnitude of the difference between said signal strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .
- 9.** The method of claim 6 wherein estimating the location of said wireless terminal comprises generating a two-dimensional probability distribution for the location of said wireless terminal based on the absolute magnitude of the difference between said signal strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .

10. A method comprising:

deducing a signal strength of a first signal, R_D , at a wireless terminal based on a signal-strength measurement of a second signal, R_U , at the location where said first signal is transmitted; and

estimating the location of said wireless terminal based on said signal strength of said first signal, R_D .

11. The method of claim 10 wherein deducing said signal strength of said first signal, R_D , is also based on a transmit strength of said first signal, T_D .

12. The method of claim 10 wherein deducing said signal strength of said first signal, R_D , is also based on a transmit strength of said second signal, T_U , that is transmitted by said wireless terminal.

13. The method of claim 10 wherein deducing said signal strength of said first signal, R_D , is also based on an attenuation for said second signal, A_U , between said wireless terminal and the location where said first signal is transmitted.

14. The method of claim 10 wherein estimating the location of said wireless terminal comprises pattern matching said signal strength of said first signal, R_D , against a database that associates candidate locations for said wireless terminal with predicted signal-strength measurements for said first signal.

15. The method of claim 10 wherein estimating the location of said wireless terminal is also based on a signal-strength measurement of a third signal, R_I , at said wireless terminal.

16. The method of claim 15 wherein estimating the location of said wireless terminal is based on said signal strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .

17. The method of claim 15 wherein estimating the location of said wireless terminal is based on the absolute magnitude of the difference between said signal strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .

18. The method of claim 15 wherein estimating the location of said wireless terminal comprises generating a two-dimensional probability distribution for the location of said wireless terminal based on the absolute magnitude of the difference between said signal

strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .

19. The method of claim 10 further comprising removing the effects of fast fading on R_U .

20. A method comprising:

deducing a signal strength of a first signal, R_D , at a wireless terminal based on an attenuation of a second signal, A_U , that is transmitted by said wireless terminal; and

estimating the location of said wireless terminal based on said signal strength of said first signal, R_D .

21. The method of claim 20 wherein deducing said signal strength of said first signal, R_D , is also based on a transmit strength of said first signal, T_D .

22. The method of claim 20 wherein deducing said signal strength of said first signal, R_D , is also based on a signal-strength measurement for said second signal, R_U , at the location where said first signal is transmitted.

23. The method of claim 20 wherein deducing said signal strength of said first signal, R_D , is also based on a transmit strength of said second signal, T_U .

24. The method of claim 20 wherein estimating the location of said wireless terminal comprises pattern matching said signal strength of said first signal, R_D , against a database that associates candidate locations for said wireless terminal with predicted signal-strength measurements for said first signal.

25. The method of claim 20 wherein estimating the location of said wireless terminal is also based on a signal-strength measurement of a third signal, R_I , at said wireless terminal.

26. The method of claim 25 wherein estimating the location of said wireless terminal is based on said signal strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .

27. The method of claim 25 wherein estimating the location of said wireless terminal is based on the absolute magnitude of the difference between said signal strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .

28. The method of claim 25 wherein estimating the location of said wireless terminal comprises generating a two-dimensional probability distribution for the location of said wireless terminal based on the absolute magnitude of the difference between said signal strength of said first signal, R_D , and said signal-strength measurement of said third signal, R_I .